

REMARKS

Claims 1-15 are all the claims pending in the application.

Claim 8 is amended.

The Applicant thanks the Examiner for considering the references cited in IDS filed on January 4, 2006, March 11, 2005, and August 4, 2004.

Additionally, Applicant respectfully request the Examiner to acknowledge the claim for priority under 35 U.S.C. § 119, and receipt of certified copy of the priority document Republic of Korea Application number 10-2003-0011366, submitted December 9, 2003.

Claim Rejections - 35 U.S.C. § 101

Claims 8-15 are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. No tangible result.

“To properly determine whether a claimed invention complies with the statutory invention requirements of 35 U.S.C. § 101, USPTO personnel must first identify whether the claim falls within at least one of the four enumerated categories of patentable subject matter recited in section 101 (process, machine, manufacture or composition of matter)”. [The USPTO "Interim Guidelines for Examination of Patent applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005)]

“The burden is on the USPTO to set forth a prima facie case of unpatentability. Therefore if the examiner determines that it is more likely than not that the claimed subject

matter falls outside all of the statutory categories, the examiner must provide an explanation”.
[the USPTO "Interim Guidelines for Examination of Patent applications for Patent Subject
Matter Eligibility" (Official Gazette notice of 22 November 2005)]

The Examiner has rejected claims 8-15 under 35 U.S.C. § 101, as allegedly being directed to non-statutory subject matter. The only rationale given by the Examiner is, “No tangible result”. However, “After the examiner identifies **and explains in the record the basis for why a claim is for an abstract idea with no practical application**, then the burden shifts to the applicant to either amend the claim or make a showing of why the claim is eligible for patent protection. See, e.g., In re Brana, 51 F.3d 1560, 1566, 34 USPQ 2d 1436, 1441 (Fed. Cir. 1995); see generally MPEP Sec. 2107 (Utility Guidelines). [The USPTO "Interim Guidelines for Examination of Patent applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005)]

In this case, the Examiner merely states, “No tangible result”. Clearly the Examiner has failed to meet his burden of explaining in the record the basis for why claim 8 is for an abstract idea with no practical application. “An examiner must ascertain the scope of the claim to determine whether it covers either a Sec. 101 judicial exception or a practical application.” The Examiner has not provided any analysis purporting to explain how claim 8 falls within a judicial exception of statutory subject matter. “For claims including such excluded subject matter to be eligible, the claim must be for a practical application of the abstract idea, law of nature, or natural phenomenon. Diehr, 450 U.S. at 187, 209 USPQ at 8 (“application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent

protection."); Benson, 409 U.S. at 71, 175 USPQ at 676 (rejecting formula claim because it "has no substantial practical application")." [The USPTO "Interim Guidelines for Examination of Patent applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005)]

In this case, the Examiner's statement, "No tangible result" does not allege that the claim falls within one of the judicial exceptions to statutory subject matter, and without an explanation why the claim falls within such an exception, it is not clear why it would be relevant whether the claim produces a tangible result. At least because the Examiner has failed to present a prima facie case of unpatentability, Applicant respectfully requests that the rejection under 35 U.S.C. § 101 be withdrawn. Additionally, if the Examiner were to maintain this rejection in the next Office Action by formulating a proper rejection, Applicant respectfully requests that the Office Action not be made final, in order to provide Applicant with an opportunity to respond to the rejection.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 1, 2, 7, 8, 10-12 under 35 U.S.C. 102(e) as allegedly being anticipated by Kwong et al. US 6,484,188 B1. Applicant traverses this rejection as follows.

Claim 1 recites *inter alia*, a first memory unit for maintaining the byte codes loaded by the class loader unit and native codes generated by compiling the byte codes in an accessible state. On page 3 of the Office Action, the Examiner maintains that Kwong et al. at column 3, lines 1-4, suggest such features, but Applicant respectfully disagrees.

While the cited portion of Kwong refers to a Java Virtual Machine and various memory areas, the Examiner does not explain or specify how this disclosure suggests a first memory unit for maintaining the byte codes loaded by the class loader unit and native codes generated by compiling the byte codes in an accessible state. Furthermore, upon reviewing the reference, Applicant submits that the cited portions, as well as the remaining portions of the reference, fail to teach the above features. If the Examiner maintains the rejection, Applicants respectfully request the Examiner to explain, with particularity, how the claimed features read on Kwong.

In contrast, Kwong points out that the Java Virtual Machine maintains the objects in memory and the Java run-time keeps track of all of these references of the objects in memory, where the Java run-time system automatically removes the objects from memory when the object is no longer in use (column 3, lines 54-64). Therefore, by removing these objects from memory, Kwong does not disclose the claimed first memory unit for maintaining the byte codes loaded by the class loader unit and native codes generated by compiling the byte codes in an accessible state. In light of the discussion above, Applicant submits that claim 1 is patentable over Kwong for at least these reasons. Also, claims 2 and 7 should be allowable based on their dependencies from claim 1.

Additionally, claim 1 recites *inter alia*, a second memory unit for storing the native codes that are loaded into the first memory unit in the accessible state. The Examiner maintains that this feature is taught by Kwong at (column 3, lines 1-4, as described by a Java Virtual Machine and various memory areas). However, as argued above, where Kwong fails to disclose a first memory unit for maintaining the byte codes loaded by the class loader unit and native codes

generated by compiling the byte codes in an accessible state, thus it is logically impossible to disclose a second memory unit for storing the native codes that are loaded into the first memory unit in the accessible state. Therefore, claim 1 is patentable over Kwong for at least this additional reason.

Furthermore, independent claim 1, recites a native code manager unit for searching the native codes stored in the second memory unit and loading requested native codes into the first memory unit according to a request by a class loader unit. The Examiner maintains that this feature is taught by Kwong at (column 6, lines 20-30, and see Java class file manager)

Kwong teaches a Java class file manager that reads in class file information and sets everything for the next phase, such as bytecode image, the constant pool information, and the interfaces to be used by the later phases to access various information stored in the class file (column 6, lines 22-28). Where, the Java class files are bytecodes that are compiled from Java programming language. These bytecodes are instructions for a Java Virtual Machine that are loaded by the class loader. Eventually these Bytecodes are turned into native code by the JIT compiler (column 3, Lines 9-20). Clearly, a Java class file manager that reads in class file information that has not been loaded by a class loader, can not compile the class file information into native code. As a result, Kwong fails to disclose or suggest a native code manager unit for searching the native codes stored in the second memory unit and loading requested native codes into the first memory unit according to a request by a class loader unit. Therefore, claim 1 is patentable over Kwong for at least this additional reason.

Moreover, independent claim 1 recites an execution unit for executing the native codes that are loaded into the first memory unit in the accessible state. However, the examiner fails to show how the prior art suggests this claim 1 limitation. Therefore, we respectfully request the Examiner's comments.

Claim 8 recites limitations similar to those present in independent claim 1 discussed above. Therefore, claim 8 is patentable over Kwong for the same reasons discussed above with respect to the patentability of claim 1. The remaining claims 10-12 should be allowable based on their dependency.

Claim Rejection - 35 U.S.C. § 103

The Examiner has rejected claims 3, 4, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Kwong in view of Benson (6,421,689 B1) . Applicant traverses these rejections because the combination of Kwong and Benson fails to disclose or suggest all of the claim limitations as stated in claim 1. Claims 3, 4, and 13 should be allowable at least based on their dependencies for the reasons described above.


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111
U.S. Application No. 10/730,046

Attorney Docket No.: Q76054

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Peter A. McKenna
Registration No. 38,551

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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